REMARKS

The present remarks are in response to the Office Action of March 2, 2005. Claims 6-10 and 24 are currently pending.

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, the Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action, the following rejections were made:

(1) claims 6-10 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat No. 5,942,560 (hereinafter "Idogawa");

(2) claim 24 was rejected under 35 U.S.C. 103(a) as being unpatentable over Idogawa; and

(3) claims 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Idogawa in view of U.S. Pat No. 4,795,794 (hereinafter "Winnik").

Rejections under 35 U.S.C. 102(b) and 103(a)

Before discussing the rejections under 35 U.S.C. 102(b), it is thought proper to briefly state what is required to sustain such a rejection. It is well settled that "[a] claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). In order to establish anticipation under 35 U.S.C. §102, all elements of the claim must be found in a single reference. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.,* 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986), *cert. denied* 107 S.Ct. 1606 (1987). In particular, as pointed out by the court in *W.L. Gore & Assoc., Inc. v. Garlock, Inc.,* 220 U.S.P.Q. 303, 313 (Fed. Cir. 1981), *cert denied,* 469 U.S. 851 (1984), "anticipation requires that each and every element of the claimed invention be disclosed in a prior art reference." "The identical invention must be shown in as complete detail as is contained in the...claim." *Richardson v. Suzuki Motor Co.* 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Further, before discussing the obviousness rejection herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of prima facie obviousness by showing some motivation in a prior art reference to modify that reference, or combine that reference with multiple references, to teach all the claim limitations in the instant application. Applicants respectfully assert the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in this rejection.

Rejections over Idogawa

Claims 6-10 were rejected under 35 U.S.C. 102(b) as being anticipated by Idogawa. Idogawa discloses a process for making a colored resin fine particle water base dispersion liquid which can be a base for an ink. The dispersion liquid is produced by mixing a water soluble basic dye with a mixed vinyl polymer containing a vinyl monomer having an acid functional group and emulsion-copolymerizing the mixture (see abstract). Idogawa further teaches that a hydrophilic monomer alone, such as a vinyl monomer having an acid functional group cannot be emulsion-

polymerized in many cases (col 4, lines 7-9). The reference further discloses that the hydrophilic vinyl monomer mixed with a hydrophobic vinyl monomer is preferred for emulsion-polymerization (col 4, lines 9-11). Idogawa explains that the presence of the vinyl monomer having an acid functional group improves the admixture of the water soluble basic dye with the mixed vinyl monomers (col 4, lines 23-26). In other words, the hydrophilic monomer having the acid functional group improves the admixture of the basic dye in the emulsion. The addition of a hydrophobic monomer would not improve the mixing of a water soluble basic dye. Idogawa does not disclose pH values at which the process is carried out, and explicitly states that the vinyl monomers having acid functional groups are added as hydrophilic moieties to improve the emulsion.

In contrast, claim 6 discloses a method for preparing amphipathic polymer particles comprising, *inter alia*, admixing an aqueous carrier, an unsaturated monomer containing a hydrophobic moiety, an unsaturated monomer containing a convertible moiety in hydro**phobic** form, and a surfactant to form an emulsion. Following admixing, the emulsion is polymerized. By admixing the hydrophobic monomer and the convertible moiety in its hydrophobic form, a more thorough and uniform mixing of the monomers occurs in the hydrophobic phase of the emulsion. When two different hydrophobic monomers are admixed in the hydrophobic phase of an emulsion, such uniform mixing occurs, and the ratio of the different monomers is translated effectively to the polymeric product. In other words, both hydrophobic monomers mix more thoroughly and are much more effectively contained within the hydrophobic phase prior to and during polymerization.

Conversely, when a hydrophobic monomer is admixed with a hydrophilic monomer in an emulsion, less-uniform mixing occurs, and the ratio of the different monomers is not translated as effectively to the polymeric product. This is due in part to i) the tendency for movement of the hydrophilic monomer into the aqueous phase of the emulsion, i.e. some of the hydrophilic monomer will leach out into the aqueous phase, and ii) the separate clumping of hydrophilic and hydrophobic monomers in the emulsion, i.e. a less homogenous mixture is present during polymerization. As a result, the ratio of hydrophilic monomers in contact with hydrophobic monomers during polymerization is reduced from the ratio as initially included in the emulsion, thus producing polymeric particles with vastly different

monomer ratios and configurations compared to those prepared in accordance with the present invention. Even if the Examiner were to allege that Idogawa describes the use of monomers that may be convertible, there is no recognition of this property with respect to the advantages of forming hydrophobic mixtures for emulsion polymerization. Rather, Idogawa teaches admixing a vinyl monomer having an acid functional group in a hydrophilic form to improve the emulsion.

Moreover, the Examiner has based the present rejection on the Idogawa disclosure which teaches admixing a hydrophobic vinyl monomer, namely methyl methacrylate, and a suitable amount of 2-methacryloyloxyethyl succinate, a vinyl monomer having an acid functional group, to form an emulsion for polymerization. As per the discussion above, however, Idogawa teaches that the 2-methacryloyloxyethyl succinate is to be added as a hydrophilic moiety to improve the admixture of the water soluble dye with the vinyl monomers, rather than as a hydrophobic moiety (which can be converted after polymerization) as required by claim 6.

Accordingly, the instantly claimed invention is not anticipated by the cited reference, as Idogawa lacks at least one element of claim 6. Applicant submits that the present rejection is improper, and respectfully requests that it be withdrawn. Because claims 7-10 depend from claim 6 and are thus considered to be narrower in scope, and are assumed to be allowable along with the claim from which they depend.

Claim 24 was rejected under 35 U.S.C. 103(a) as being unpatentable over Idogawa. Because claim 24 depends from claim 6, it is assumed that to be allowable along with claim 6. However, the Applicant feels that some discussion is required relating to the Examiner's rejection of claim 24 in order to more efficiently move the prosecution of the present application forward. As part of the rejection, the Examiner has stated that Idogawa does not specifically disclose the step of converting the hydrophobic moiety into a hydrophilic form, but that Idogawa does suggest the use of pH controllers if necessary. The Examiner further states that the change in pH is the method used by the Applicant to provide such a conversion, and that it would have been obvious to those skilled in the art that the addition of such pH controllers would result in converting the hydrophobic moiety into a hydrophilic one.

The Applicant respectfully disagrees with this assertion for at least the following reasons.

First, Idogawa does not disclose a step of converting the hydrophobic moiety into a hydrophilic form because this conversion is not contemplated by the reference, and because a convertible moiety is never utilized in a hydrophobic form. It would not be obvious to one skilled in the art to utilize the suggestion in the reference of a pH controller to convert a monomer from a hydrophobic form to a hydrophilic form when the use of the hydrophobic form is not taught or suggested by the reference. Further, as Idogawa copolymerizes a hydrophobic monomer with a vinyl monomer having acid functional groups, if any conversion were to occur by pH adjustment, it would be from hydrophilic to hydrophobic, which does not read on the presently claimed invention.

Second, the pH controller is disclosed in the reference for optional use in a list of other optional ingredients, such as preservatives and defoaming agents. The pH controller is merely in such a list because it may provide some benefit to the emulsion. There is no teaching or suggestion in the reference as to how or why such a pH controller should be used. There is no teaching or suggestion as to whether pH should be lowered, raised, buffered, etc. With no recognition of the convertible nature of the monomer, there is no suggestion that the nature of the monomers can be modified after polymerization. As such, it would not be obvious to one skilled in the art to adjust pH in order to convert a hydrophobic moiety into a hydrophilic moiety, particularly when no hydrophobic moiety is taught by the reference. As such, it is respectfully requested that this rejection be withdrawn.

Rejection over Idogawa in view of Winnik

Claims 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Idogawa in view of Winnik. As was discussed above, claims 7 and 8 depend from claim 6 and are thus considered to be narrower in scope, and are assumed to be allowable along with the claim from which they depend. Further, though Winnik was cited as a secondary reference as allegedly containing elements found in these two dependent claims, it is notable that Winnik does not cure the apparent defects of the Idogawa rejections of claim 6. Thus, Idogawa and Winnik do not teach each and

every element of claim 6, and certainly do not teach each and every element of claims 7 and 8. Reconsideration of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing, Applicant believes that claims 6-10 and 24 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone Susan E. Heminger at (650) 236-2738 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 2 day of June, 2005.

Respectfully submitted,

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